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Docket Nos.: 50-348 50-424
50-364 50-425

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Joseph M. Farley Nuclear Plant
Vogtle Electric Generating Plant

Response to ~~NRC Bulletin 2004-02~~ *GL 2004-02*

"Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis
Accidents at Pressurized-Water Reactors"

Ladies and Gentlemen:

Pursuant to the requirements of Nuclear Regulatory Commission (NRC) Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," issued to the Southern Nuclear Operating Company (SNC) on September 13, 2004, SNC hereby submits Enclosures 1 and 2 which constitute the required 90-day responses for Joseph M. Farley Nuclear Plant (FNP) Units 1 and 2 and Vogtle Electric Generating Plant (VEGP) Units 1 and 2.

Mr. L. M. Stinson states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

This letter contains no NRC commitments. If you have any questions, please advise.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

L. M. Stinson

Sworn to and subscribed before me this 25 day of February, 2005.

Notary Public

My commission expires: 6-7-05

LMS/DWM/sdl

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Enclosures: 1. Farley Nuclear Plant Response to Generic Letter 2004-02
2. Vogtle Electric Generating Plant Response to Generic Letter 2004-02

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. L. M. Stinson, Vice President – Plant Farley
Mr. D. E. Grissette, Vice President – Plant Vogtle
Mr. J. R. Johnson, General Manager – Plant Farley
Mr. W. F. Kitchens, General Manager – Plant Vogtle
RType: CFA04.054; CVC7000; LC# 14222

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Mr. S. E. Peters, NRR Project Manager – Farley
Mr. C. Gratton, NRR Project Manager – Vogtle
Mr. C. A. Patterson, Senior Resident Inspector – Farley
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

Enclosure 1

**Farley Nuclear Plant
Response to NRC Generic Letter 2004-02,
“Potential Impact of Debris Blockage on Emergency Recirculation During Design
Basis Accidents at Pressurized-Water Reactors”**

**Farley Nuclear Plant
Response to NRC Generic Letter 2004-02,
“Potential Impact of Debris Blockage on Emergency Recirculation During Design
Basis Accidents at Pressurized-Water Reactors”**

Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:

(1) A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.

FNP Response to Item 1:

Southern Nuclear Operating Company (SNC) intends to address the issues required by GL 2004-02 using methodology developed by NEI and documented in Guidance Report NEI 04-07, as amended by the NRC's Safety Evaluation Report on these guidelines as the basis of the analysis. However, SNC may substitute simplifying assumptions, alternative methodologies or inputs, hardware-specific head loss correlations, and/or plant-specific information as appropriate. Structural analysis will follow commonly used analytical techniques and widely accepted engineering practices. In the event that a hardware solution for FNP is determined to be relatively insensitive to some results of certain analyses, those may not be performed.

This analysis is scheduled to be completed by September 1, 2005.

Industry efforts are under way to evaluate coating failures, the effects of chemical reactions in containment during a LOCA, and the downstream effects of debris laden fluid. To the extent that information from these efforts becomes available and is applicable to Farley specific parameters, SNC will utilize it as part of the analysis. However, if the information from these activities is not available, SNC will address these issues using appropriate assumptions and methodologies.

Farley Nuclear Plant
Response to NRC Generic Letter 2004-02,
“Potential Impact of Debris Blockage on Emergency Recirculation During Design
Basis Accidents at Pressurized-Water Reactors”

(2) A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.

FNP Response to Item 2:

Containment walkdowns have been completed at Farley Units 1 and 2 to support the analysis of debris blockage as identified in the Generic Letter. The walkdowns were performed by SNC and contractor personnel using the guidelines provided in NEI 02-01, “Condition Assessment Guidelines, Debris Sources Inside Containment,” Revision 1.

Enclosure 2

**Vogtle Electric Generating Plant
Response to NRC Generic Letter 2004-02,
“Potential Impact of Debris Blockage on Emergency Recirculation During Design
Basis Accidents at Pressurized-Water Reactors”**

**Vogtle Electric Generating Plant
Response to NRC Generic Letter 2004-02,
“Potential Impact of Debris Blockage on Emergency Recirculation During Design
Basis Accidents at Pressurized-Water Reactors”**

Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:

(1) A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.

VEGP Response to Item 1:

Southern Nuclear Operating Company (SNC) intends to address the issues required by GL 2004-02 using methodology developed by NEI and documented in Guidance Report NEI 04-07, as amended by the NRC's Safety Evaluation Report on these guidelines as the basis of the analysis. However, SNC may substitute simplifying assumptions, alternative methodologies or inputs, hardware-specific head loss correlations, and/or plant-specific information as appropriate. Structural analysis will follow commonly used analytical techniques and widely accepted engineering practices. In the event that a hardware solution for VEGP is determined to be relatively insensitive to some results of certain analyses, those may not be performed.

This analysis is scheduled to be completed by September 1, 2005.

Industry efforts are under way to evaluate coating failures, the effects of chemical reactions in containment during a LOCA and the downstream effects of debris laden fluid. To the extent that information from these efforts becomes available and is applicable to VEGP specific parameters, SNC will utilize it as part of the analysis. However, if the information from these activities is not available, SNC will address these issues using appropriate assumptions and methodologies.

**Vogtle Electric Generating Plant
Response to NRC Generic Letter 2004-02,
“Potential Impact of Debris Blockage on Emergency Recirculation During Design
Basis Accidents at Pressurized-Water Reactors”**

(2) A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.

VEGP Response to Item 2:

Containment walkdowns have been completed at VEGP Units 1 and 2 to support the analysis of debris blockage as identified in the Generic Letter. The walkdowns were performed by SNC and contractor personnel using the guidelines provided in NEI 02-01, “Condition Assessment Guidelines, Debris Sources Inside Containment,” Revision 1.